### M.S. DEGREE EXAMINATION

### **BRANCH II – ORTHOPAEDIC SURGERY**

### APPLIED BASIC SCIENCES IN ORTHOPAEDIC SURGERY

Q.P. Code: 222219

Time: 3 hours Maximum: 100 marks

(180 Min)

## Answer ALL questions in the same order.

Write notes on		Pages	Time	Marks
		(Max.)	(Max.)	(Max.)
I.	Anatomy			
1.	Blood supply of femoral head in adults	3	9	5
2.	Petit's triangle and its importance	3	9	5
3.	Typical lumbar vertebra and its significance	3	9	5
4.	Ligament of Bigelow and its importance	3	9	5
II.	Physiology			
1.	Regulation of Calcitonin	3	9	5
2.	Physiology of Shock	3	9	5
3.	Complex regional pain syndrome	3	9	5
4.	Physiology of Osteoporosis	3	9	5
III.	Biochemistry			
1. Factor VIII and its significance		3	9	5
2. BMP		3	9	5
3.	Bio chemical aspects of Renal Osteodystrophy	3	9	5

# IV. Pathology

1. Pathogenesis of Chronic osteomyelitis	3	9	5
2. Pathology of Septic arthritis	3	9	5
3. Myositis ossificians and its importance	3	9	5
V. Microbiology			
1. Laboratory Diagnosis of Gas gangrene	3	9	5
2. Applications of BACTEC System	3	9	5
3. Segregation of hospital waste	3	9	5
VI. Pharmacology			
1. Bisphosphonates - action and uses	3	9	5
2. Baclofen - action and adverse reactions	3	9	5
3. Indomethacin - action and applications	3	9	5

\*\*\*\*\*